

2014 NEC Changes Part 2 (Homestudy)

Utah

COURSE OUTLINE

Credit Hours	8 Hours
Course Timetable	Attached
Course Description	<p>This homestudy code course reviews 100 important changes from Articles 404.8 – Chapter 9 of the 2014 National Electrical Code. Each section on the code change includes an illustration, commentary about the change, and details on the significance of the change. Each section also presents a multiple choice question, with four possible answers.</p>
Course Objectives	<p>After completing this course the participant will be able to apply the changes to the National Electrical Code in everyday wiring practice.</p>
Method of Presentation	<p>This homestudy course requires participants to answer multiple choice questions after reviewing the selected sections of the 2014 National Electric Code Changes. Homestudy answer choices are generated randomly per user to ensure tests are individualized. After all questions have been answered, participants must complete an attestation statement to affirm their identities and veracity of the course completion.</p>
Method of Evaluation	<p>The course participant must complete all 100 individualized multiple choice questions with a score of at least 75% in order to get credit for the course. Credit will not be awarded unless the participant has completely answered all questions and met or exceeded the 75% accuracy benchmark.</p>
Qualification of Instructor	<p>Resume of course instructor, David Burt, is attached.</p>

2014 NEC Changes Part 2 Homestudy		
Question	Section	Time (minutes)
1	404.8(C) Accessibility and Grouping Multipole Snap Switches	4
2	404.10(B) and 406.5 Mounting Snap Switches	4
3	406.3(E)(New) Controlled Receptacle Marking	4
4	406.4(D) General Installation requirements	4
5	406.5(E) Receptacles in Countertops	4
6	406.5(F)(New) Receptacles in Countertops and Similar Work Surfaces. Receptacles in Seating Areas and Other Similar Surfaces.	4
7	406.9(B)(1) Receptacles of 15 and 20 Amperes in a Wet Location.	4
8	406.12 Tamper-Resistant Receptacles	4
9	406.15 (New) Dimmer-Controlled Receptacles	4
10	408.3 Support and Arrangement of Busbars and Conductors(E) and 408.3(F)(1)&(2) DC buses. Support and Arrangement	4
11	408.4(B) Field ID Required Source of Supply.	4
12	408.55 Wire Bending Space	4
13	409.20 Conductor- Minimum Size and Ampacity Industrial Control Panels	4
14	410.6 Listing Required. Retrofit Kits	4
15	410.10(F) (New) Luminaires Under Roof Decking	4
16	410.23 Covering of Combustible Material at Outlet Boxes	4
17	410.130(G)(1) Exception 4 Deleted/New Exception	4
18	411 Title, 411.1, Lighting Systems Operating at 40 Volts or Less and Lighting Equipment connected to Class 2 power sources	4
19	422.5 GFCI Protection Readily Accessible	4
20	422.16(B)(1) Flexible Cords in Waste Disposers	4
21	422.19, 422.20, and 422.21 (New) Spaces for Conductors, Outlet Boxes to Be Covered, Covering of Comb.	4
22	422.23 Tire Inflation and Automotive Vacuum Machines.	4
23	422.49 High Pressure Spray Washers	4
24	422.51 Vending Machines	4
25	424.19 Disconnecting Means (Fixed Electric Space Heating Equipment)	4
26	424.66(A) and (B) Installations Duct Heaters	4
27	430.22(G) Single Motor	4
28	430.52(C)(5) Rating or Setting for Individual Motor Control. Power Electronic Devices	4
29	430.53(D) Several Motors or Loads on One Branch Circuit	4
30	430.130 and 430.131 Branch-Circuit Short-Circuit and Ground-Fault Protection for Single Motor Circuits Containing Power Conversion Equipment.	4
31	430.233 Guards for Attendants	4
32	445.11 New Marking at Generators	4
33	445.18 Disconnecting Means Required for Generators	4
34	445.20 GFCI Protection	4

35	450.10(A)(New) Dry Type Transformer Enclosures	4
36	450.11(B) Source Marking.	4
37	480.3 Battery and Cell Terminations.	4
38	480.8(C) Storage Batteries. Accessibility	4
39	480.9(C) Spaces About Battery Systems	4
40	490.22 Isolating Means	4
41	490.47 Switchgear used as service equipment.	4
42	490.48(New) Substations	4
43	501.40 Multiwire Branch Circuits Deleted	4
44	514.3(B) Class 1 Locations Motor Fuel Dispensing Facilities	4
45	514.3(C)(D)(E) Motor Fuel Dispensing Stations	4
46	516. Spray Application, Dipping...	4
47	517.2 Deletion	4
48	517.16 Use of Isolated Ground Receptacles	4
49	517.18(A) and (B) General Care Areas	4
50	517.19(B) and 517.19(C) New Patient Bed Location Receptacles and 517.19(C) Operating Room Receptacles.	4
51	517.26 Application of Other Articles	4
52	517.30(B) and (E) and (G) Essential Electrical Systems for Hospitals	4
53	517.41(E) Essential Electrical Systems	4
54	547.2 and 547.5 Equipotential Plane (Agr. Buildings)	4
55	550.15(H) Under-Chassis Wiring	4
56	590.4(D)(2) Receptacles in wet Locations	4
57	590.4(I) Terminations at Devices	4
58	590.4(J) Temp Installations. Support	4
59	600.3, 600.4(E) Markings Installation (signs)	4
60	600.6(A)(1) Disconnects	4
61	620.21(Exception) Wiring Methods (Elevators)	4
62	625 EVSE	4
63	645.14 and 645.15 Equipment Grounding and Bonding IT Equipment	4
64	645.27 Selective Coordination COPS	4
65	646 New Modular Data Centers	4
66	680.12 Disconnecting Means - Fountain	4
67	680.21(C) GFCI Protection Pool Pump Motors	4
68	680.22(A)(1) and (2) Lighting, Recept, Equipment	4
69	680.22(B)(6) Low Voltage Luminaires	4
70	680.25(A)(1) Exception feeders	4
71	680.26(C) Equipotential Bonding	4
72	680.42(B) Outdoor Spas Bonding	4
73	680.57(B) GFCI Protection Signs	4
74	690.5(A) Ground Fault Protection PV	4
75	690.7 Maximum Voltage PV	4
76	690.9 Overcurrent Protection	4
77	690.12 Rapid Shutdown of PV Systems on Buildings	4
78	690.15(C) Direct Current Combiner Disconnect	4
79	690.17(A) Disconnect Type. Manually Operable.	4
80	690.31 Wiring Methods	4
81	690.41 System Grounding	4

82	690.47(D) Additional Auxiliary Electrodes	4
83	694.1 Wind Systems (scope, informational note)	4
84	700.8 Surge Protection	4
85	700.12 (F) Emergency Systems. Unit Equipment.	4
86	700.19 Multiwire Branch Circuits	4
87	702.7(C) Signs Power inlet	4
88	702.12 Outdoor Generator Sets	4
89	705.12 Point of Connection	4
90	705.31 Location of Overcurrent Protection	4
91	728 New Fire-Resistive Cable Systems	4
92	750 New ENERGY MANAGEMENT SYSTEMS	4
93	770.110 Raceways and Cable Routing Assemblies	4
94	770.180 Grounding Devices	4
95	800.12 Innerduct	4
96	800.24 Mechanical Execution of Work	4
97	800.182 Communications Raceways and Cable Routing	4
98	820.3 (B) - (F) Other Articles	4
99	Chapter 9 Table 1	4
100	Chapter 9 Tables Table 4 & 5 (and note for Table 5)	4
	Total Time (in minutes)	400
	Time Required (in minutes)	400

David C. Burt
dcburt@jadelearning.com
P.O. Box 17228
Raleigh, NC 27619

Education

Bachelor of Arts, Bates College
Master of Divinity, Union Theological Seminary

Licenses

9665-U	North Carolina Electrical Contracting
40619E	Massachusetts Journeyman
104880	California Electrical Journeyman
BURTTDC953KL	Washington State Administrator

Work Experience

2004 to Present

President, JADE Learning, Inc.
JADE Learning is an educational company providing online and in person training on the National Electrical Code and other trade related topics.

2003

President JADE Construction College, Inc.
JADE Construction College provided continuing education courses for electrical license renewal.

1996-2002

President, JADE Electric, Inc.
Technical Skills Training Company
JADE Electric developed and delivered classes on the National Electrical Code.

1990-1995

Technical Instructor
Allen-Bradley Company
Taught classes on programmable controllers.

1987-1990

Technical Specialist
Electrical Supply and Equipment Co.
Provided technical support for Allen-Bradley Programmable Controllers.

1983-1987

Instructor, Electrical Installation and Maintenance
Rockingham Community College
Taught a 1-year certificate program for entry level electricians

1983-1994

Owner, JAECO Electric
Part-Time Electrical Contracting Company

Professional Organizations

National Fire Protection Association
International Association of Electrical Inspectors
Wake County Association of Electrical Contractors

Publications

Commercial Blueprint Reading, Residential Wiring, 2005 National Electrical Code Changes, 2008 National Electrical Code Changes, House Wiring, According to the 2008 National Electrical Code, Services and Grounding, Commercial & Industrial Wiring, 2011 NEC Changes, 2014 NEC Changes